Today in Washington:

Washington State has a wealth of data that are used to monitor health status, including information generated by the Behavioral Risk Factor Surveillance System (BRFSS) survey, the Comprehensive Hospital Abstract Reporting System (CHARS)[8], and data from the state Department of Health Center for Vital Statistics[9]. In addition, numerous partners maintain data systems that monitor the health status of specific populations, including the Comprehensive Assessment Reporting Evaluation tool for assessing the older population, the McKesson Health Solutions CareEnhance Report for Medicaid clients, and the American Indian Health Care Delivery Plan.

Data that are essential to addressing the continuum of care—from risk factor detection and control through rehabilitation and long-term case management— are spread across multiple organizations and agencies. For this reason, it is challenging to conduct a comprehensive assessment to monitor health status effectively. Collaboration is needed to integrate and manage public health-related information systems for this purpose.

Goal 1:

A comprehensive set of heart disease and stroke data, integrated from public and private sources, is available to inform, guide, and monitor the action plan and system of care, from policy to practice.

Objectives:

1. Identify the parties with cardiovascular data and a potential site for an integrated data warehouse.

2. Inventory public and private CVD data sources.

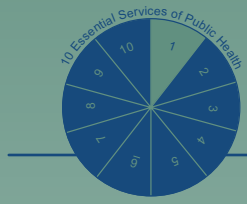
3. Identify key CVD data elements needed.

4. Identify gaps, and plan and seek solutions, in areas including:
   - Screening of health plan data as a basis for evaluation and inventory of trends
   - Burden (incidence, prevalence), from improved data sources over current system of self-report, death certificates, and hospital diagnoses, at the state and local levels, where appropriate. Assess the burden of disability, social burden including quality of life, and the burden on the long-erm care system.
   - The Comprehensive Hospital Abstract Reporting System (CHARS)—for example, adding data on race and ethnicity
   - Primary prevention in patients with identified risk factors—high blood pressure, high blood cholesterol, diabetes
   - Acute care, emergency transport, and rehabilitation
   - Secondary prevention in patients with established heart disease or stroke

5. Establish data-sharing agreements.

6. Build the CVD data warehouse.

7. Develop a communication plan regarding the data warehouse and how to access data.



1. Monitor health status to identify community health problems.

Evaluation:

1. The state's health status is assessed and monitored through data describing critical indicators of health, illness, and health resources that are collected in collaboration with local public health systems and other state partners. Particular attention is given to the vital statistics and health status of identified special and high-risk groups.

2. Assistance and capacity-building are provided to local public health and other state partners in their efforts to monitor health status and to identify health problems. Also, community assets and resources are identified that support the plan in promoting health and improving quality of life.

3. Activities to monitor health status and to identify health problems are reviewed on a periodic basis, and results are used to improve the quality and outcome of the efforts. Collaboration in integrating and managing public health-related information systems is supported and encouraged.

4. Technology and other methods to interpret and communicate health information to diverse audiences in different sectors are effectively managed and used to monitor health status and to identify health problems in Washington.

Today in Washington:

The risk factors that contribute to the largest burden of heart disease and stroke are high blood pressure, high blood cholesterol, and diabetes. These conditions can be prevented or managed through systematic adherence to established, evidence-based guidelines that include appropriate nutrition, physical activity, and medication when appropriate. Additional approaches can help to redesign the health care system to improve the quality of care to patients with chronic conditions. Currently, the best estimate of the statewide prevalence of the risk factors mentioned above is from the BRFSS survey data collected over the telephone from individuals who have been told they have these risk factors. There are limitations in interpreting these data, because the information is self-reported and has not been validated through a physical exam or lab test.

Goal 2:

Comprehensive heart disease and stroke prevention and management surveillance is used to transform the operations of the health care delivery system (public and private, local/state/tribal, program and provider) to assure identification of all persons at-risk for and with heart disease and stroke.

Objectives:

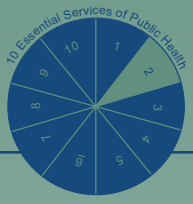
1. Develop new and strengthen existing partnerships with local health jurisdictions, tribes, and providers to identify and diagnose high risk persons in local communities.

2. Adopt appropriate evidence-based practices, including the Planned Care Model[10] and national guidelines for heart disease and stroke for the screening of individuals at increased risk of CVD, ensuring that the individuals are:
   - Identified
   - Offered evidence-based diagnostic evaluations
   - Treated appropriately.

3. Provide emphasis for special or high-risk groups:
   - Racial and ethnic groups (American Indian and Alaska Native, Asian American and Pacific Islander, African American, Hispanic)
   - Women
   - People eligible for Medicare (age)
   - Uninsured
   - Low-income.

4. Use annual data from BRFSS, CHARS, Vital Statistics, and other data sets as appropriate.

5. Support the development and use of state-based examination survey data that uses laboratory measures, clinical exam data, and questionnaire data to establish a better estimate of the burden of risk and disease, and to guide program planning.



2. Diagnose and investigate health problems and hazards.

Evaluation:

1. Through collaboration with local public health systems and other state partners, data are collected that investigate patterns of heart disease and stroke prevalence, as well as the prevalence of major risk factors.

2. Technical assistance and resources are provided to local public health systems and other state partners to ensure that appropriate evidence-based practices and national guidelines are adopted for screening individuals at increased risk of CVD.

3. Data and activities are reviewed on a regular basis, and findings are used to improve the quality and outcome of efforts to diagnose and investigate CVD and associated risk factors.

4. Resources are effectively invested, managed, and applied to identify and diagnose high-risk persons, as well as to support existing and proposed data sets needed to investigate further the burden of CVD and associated risk factors.

Today in Washington:

BRFSS data suggest that some people may recognize the signs and symptoms of a heart attack and know to call for emergency help. Hospital data clearly indicate, however, that very few acute stroke patients arrive within the small window of opportunity for time-dependent treatment. Health policy makers do not know the number of people who could have benefited from more prompt recognition and action. And despite increased media attention to the impact of heart disease and stroke, many still do not know the burden these diseases and associated risk factors place on individuals, families, communities, the workplace, and the health care system.

Goal 3:

Washington State residents know the risk factors and warning signs and symptoms for heart attack and stroke in men and women, and they know what actions to take to address their risk factors and seek care when needed.

Objectives:

1. Use effective, traditional and innovative, and targeted communication mechanisms to decrease resistance to change and to improve health literacy and access to health information and resources. Communicate consistent, simple messages targeted to
   - Cities and communities
   - Health care settings
   - Schools
   - Worksites.

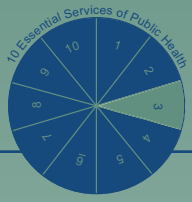
2. Collaborate with the American Heart Association/ American Stroke Association (AHA/ASA) to develop consistent messages to increase public awareness about risk factors, signs and symptoms, and appropriate action to take to address them.

3. Develop culturally appropriate communication strategies with special emphasis on disproportionately affected and hard-to-reach populations.

4. Assure the development and dissemination of tools to educate about risk factors, established disease, emergency response, and rehabilitation.

5. Develop educational strategies to empower patients to make informed choices about the care they receive.

6. Partner with other state chronic disease programs and existing networks that share similar target audiences and risk factors.



3. Inform, educate, and empower people about health issues.

Evaluation:

1. Health communication and health education and awareness initiatives are based on evidence of effectiveness, and they include culturally and linguistically appropriate messages.

2. Accessible health information and educational resources and strategies are developed in partnership with and reinforced by local public health systems and other partners.

3. The effectiveness of health communication and health education and awareness initiatives is assessed on a regular basis, and results are used to improve the quality of the messages.

4. Resources are effectively invested, managed, and applied to develop, disseminate, and assess health communication and health education initiatives.

Today in Washington:

Several entities in Washington State address some aspect of heart disease and stroke prevention and management. Currently, however, a formal process to convene a representative group of these entities does not exist. The Heart Disease and Stroke Prevention Advisory Council came together to examine existing evidence and develop a state plan despite the lack of a formal mechanism. The building of a statewide partnership is critical to collaborate in the performance of the essential services to improve the state's health status.

Goal 4:

A state heart disease and stroke prevention steering council is convened by the state Heart Disease and Stroke Prevention Program to sustain and forge partnerships, promote coordinated efforts to implement the action plan, and to support local coalitions, councils, and activities.

Objectives:

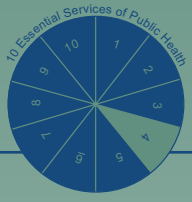
1. Create a steering council to identify and develop a statewide network of partners to implement the action plan and address CVD on an ongoing basis.
   - Link public (state and local) and private health care providers and practitioners, public health professionals, counties, and tribes.
   - Sustain partnerships at all levels (state, tribal, regional, local).

2. Identify a stroke task force with the American Heart Association/American Stroke Association to develop an integrated system of care for stroke.

3. Collaborate with purchasers of health insurance to develop coordinated worksite health and productivity activities and performance measures around heart disease and stroke.

4. Build and strengthen the partnership between the state Heart Disease and Stroke Prevention Program and regional EMS systems and hospital emergency room systems to implement evidence-based practices and models for first response and care for heart disease and stroke.

5. Use state partnerships, including other state chronic disease programs, as well as incentives to support quality improvement efforts and implementation of the Planned Care Model at the community level and in primary and specialty care and hospitals.



4. Mobilize partnerships to identify and solve health problems.

Evaluation:

1. Local public health systems and other partners are convened in a coordinated fashion to identify priorities and create effective strategies.

2. Assistance and support are provided to organize and undertake actions to improve the health of the state's communities.

3. Partnership activities are assessed for effectiveness on a regular basis, and results are used to ensure that a strong network exists to identify priorities and create effective strategies.

4. Partnerships are built to use the full range of available human and material resources to improve the health status of residents throughout the state.

Today in Washington:

A statewide effort in 1995 produced the Washington State Heart Disease and Stroke Prevention Plan—a comprehensive state plan to address the prevention of heart disease and stroke. The 1995 state plan recommended approaches to address the environment, behaviors, risk factors, and the diseases. Because of the subsequent implementation of programs that focus solely on environmental and policy approaches to reduce the prevalence of risk factors, this plan needs to reflect the increased emphasis on risk factor detection and control, emergency care and acute case management, and rehabilitation and long-term case management.

Goal 5:

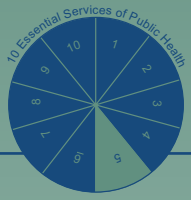
A dynamic, collaborative action plan and policies are adopted that empower consumers, result in improved health status and quality of life, reduce costs for the purchasers, and reward providers.

Objectives:

1. Adopt the action plan and the action steps and policies needed to implement the plan.

2. Create a framework for performance of the CVD system that facilitates better communication and use of population-based medicine and standardized evidence-based guidelines for care. Specific activities include:
   - Promoting development of a coordinated, standardized approach, integrating the continuum of care: addressing prevention, pre-hospital, hospital, rehabilitation.
   - Encouraging the adoption of heart disease and stroke-specific quality improvement programs in hospitals throughout the state.
   - Standardizing access to thrombolytics for qualifying acute stroke patients within 60 minutes of arrival at all licensed hospitals with emergency rooms that have the capability to provide such therapy, and exploring innovative ways to guarantee such capabilities at hospitals rapidly accessible to all Washingtonians.
   - Exploring possible policy development to allow EMS providers caring for acute heart attack or stroke patients to bypass hospitals not meeting standards for acute care.

(continued on next page)



5. Develop policies and plans that support health efforts.

- Expanding air ambulance services to equalize access to emergency heart attack and stroke care throughout the state.
- Improving the link between EMS and hospital facilities in the appropriate transport of stroke victims.
- Improving overall capacity of hospital facilities to manage stroke victims.
- Increasing the number of facilities following guidelines for cardiovascular disease care and adherence and monitoring of compliance, i.e., Joint Commission on Accreditation of Healthcare Organizations (JCAHO) certified primary stroke centers.
- Exploring ways to regulate certified primary stroke centers.
- Enhancing delivery of published guidelines for heart disease, stroke, and related risk factors.
- Addressing liability relief for rural hospitals that offer emergency stroke and heart attack care with limited specialty back-up.
- Examining health financing mechanisms, including an awards system for medical groups that achieve improved outcomes for their patients with heart disease or stroke.

Evaluation:

1. Comprehensive health improvement planning and policy development are implemented that integrate health status information, public input, analysis of policy options, recommendations for action based on proven interventions, and information for policy makers.

2. Appropriate assistance and capacity-building are provided to establish strategies and actions to guide community health improvement at the state, tribal, and local levels.

3. A democratic process of dialogue and debate is supported between groups affected by proposed health plans and policies prior to adoption of such plans and policies.

4. Resources are effectively managed and applied to assure that health planning and policy development practices meet the needs of the population.

Today in Washington:

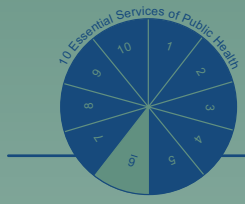
State policy makers need to place more emphasis on enforcement of regulations to address heart disease and stroke prevention and management. Two potential areas that could be explored include ensuring that practitioners have sufficient expertise through the credentialing process and requiring that acute cardiac and stroke patients are transported to appropriate facilities.

Goal 6:

An ongoing process is established to assess and monitor Washington State laws and regulations and identify opportunities to support the implementation of the action plan through new or revised legislation.

Objectives:

1. Identify all laws and regulations that pertain to the CVD system.
2. Communicate laws and regulations to all key constituencies.
3. Assess compliance and enforcement of existing laws and regulations, and collaborate with tribes.
4. Develop new mechanisms to encourage compliance.
5. Identify gaps, needed changes, and new opportunities in laws and regulations.



6. Enforce laws and regulations that protect health and ensure safety.

Evaluation:

1. All proposed laws or regulations are based on current public health science and best practice.

2. Appropriate assistance is provided to educate stakeholders about any proposed law or regulation relevant to heart disease and stroke prevention and management.

3. Processes to assess and monitor state laws and regulations are reviewed on a regular basis, and results are used to improve process quality.

4. Resources are appropriately used to develop, review, and communicate relevant laws or regulations.

Today in Washington:

Washington State has a lower rate of death from coronary heart disease than does the United States as a whole. It is not known whether the lower rate is the result of fewer Washingtonians developing coronary heart disease in the first place or because Washington has a better system of treatment and rehabilitation. A closer examination indicates that there are several populations that are disproportionately burdened with more disease than other groups. Our efforts to prevent heart disease are effective only for some residents of our state.

The rate of death from stroke in the state is higher than most of the other states in the country. Some populations are more affected by stroke than others. Also, state policy has not addressed the urgency of receiving prompt attention and treatment for stroke to the degree it has for heart attack. It is critical to connect people with needed health services so that risk factors are detected and treated, heart attacks and strokes are recognized and treated early, and appropriate levels of rehabilitation are provided.

Goal 7:

Washington State maintains a coordinated and effective heart disease and stroke system of prevention, screening, diagnosis, treatment, and rehabilitation that is available to all citizens.

Objectives:

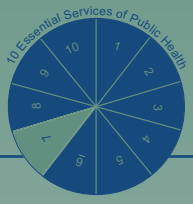
1. Ensure that a comprehensive system of care for heart disease and stroke prevention and management is in place for the entire continuum of care.

2. Develop and implement innovative ways to increase access to cardiology, neurology, and rehabilitation care.

3. Promote a coordinated and effective EMS system in operation statewide for CVD interventions.
   - Support statewide EMS capacity for response to emergency cardiac or stroke events.
   - Identify and address disparities in access to and quality of EMS across the state.
   - Standardize EMS education.

4. Identify, prioritize, and eliminate disparities in access to delivery of care for disproportionately affected groups.
   - Improve response time in rural areas.
   - Increase public access to automated external defibrillators and trained users.

5. Establish a standardized statewide pre-hospital triage plan for acute heart disease and stroke that is linked with a registry that can track process and outcome measures for quality improvement.



7. Link people to needed personal health services and assure provision of health care.

Evaluation:

1. The availability of personal health care services for the state population is assessed, and statewide partners and local public health systems work collaboratively to help assure that the entire state population has access to quality care.

2. Assistance is provided to local public health systems and other state partners to identify medically underserved populations and to develop innovative approaches for meeting their health care needs.

3. Performance is reviewed to measure effectiveness in identifying barriers to health care access and gaps in the availability of personal health care as well as ability to assure that all state residents receive appropriate and timely care.

4. Resources are managed effectively to assure the provision of health care to meet the needs of the population.

Today in Washington:

There are several professionals who must be credentialed to provide care to those with or at risk for heart disease or stroke. Credentialing provides significant opportunity to conduct better education and training to these and other public and personal health professionals to enhance knowledge and improve quality of care.

Goal 8:

Education regarding heart disease and stroke prevention and management is available and required for all licensed, registered, or certified health care providers working with CVD to increase awareness, clinical proficiency, and quality of care.

Objectives:

1. Identify and develop easily accessible, innovative CVD education and continuing medical education opportunities for all levels of clinicians in collaboration with academic and community partners.

2. Increase the proportion of hospitals with JCAHO primary stroke center certification.

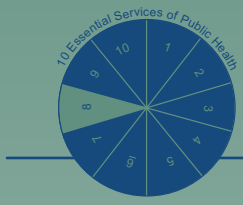
3. Increase in the number of CME offerings, and expand quality improvement activities to encourage participation in clinical learning to improve care for heart disease and stroke patients.

4. Promote and encourage a diverse and culturally knowledgeable and competent work force including non-licensed personnel.

5. Provide tools and templates for increasing competence.

6. Work with academic and community partners to distribute and encourage implementation of clinical practice guidelines.

7. Apply incentives to providers who can demonstrate quality improvement through established measures, such as existence of a patient registry or improved patient outcomes.



8. Assure a competent public and personal health care workforce.

Evaluation:

1. Training and continuing education are identified and developed that offer innovative CVD educational opportunities for all levels of clinicians in partnership with local public health systems and other state partners.

2. Appropriate levels of capacity are built to encourage and support learning to improve care for heart disease and stroke patients.

3. Educational opportunities are evaluated to measure their effectiveness and to assure material is based on current evidence-based guidelines.

4. Demonstrated improvement in the quality of health care provided is rewarded through appropriate incentive programs.

Today in Washington:

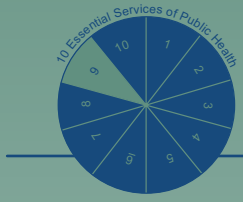
Evaluation is critical to determining the success of any program or intervention. Current systems can evaluate the effectiveness of some programs throughout the state, but Washington as yet lacks a comprehensive set of such measures.

Goal 9:

The heart disease and stroke prevention system's accessibility, effectiveness, and quality of care are measured against a consensus set of statewide (public and private) CVD performance measures that include established measurement benchmarks.

Objectives:

1. Convene a public/private stakeholder group of data users to identify consensus measurement sets.
2. Identify existing benchmarks, performance measures, and currently required reporting.
3. Identify gaps, and develop new performance measurement approaches where none exist.
4. Assure data systems can measure as planned.
5. Conduct a critical review of the data, evaluate the system, and make recommendations to the steering council to improve performance.
6. Provide performance data to programs and providers with the overall state picture, and apply data for internal quality improvement and performance improvement as appropriate.
7. Provide data to purchasers and consumers regarding system performance as appropriate.



9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Evaluation:

1. Appropriate CVD performance and outcome measures are agreed-upon and used to measure effectiveness of the system that addresses heart disease and stroke prevention and management.

2. Technical assistance is provided to local public health systems and other state partners about the availability, utilization, outcomes, and effectiveness of population-based and personal health services.

3. Ongoing assessment of and quality improvement in the state health system's performance and capacity is conducted.

4. A public/private stakeholder group is convened to identify and prioritize performance and outcome measurement sets.

Today in Washington:

Washington State is fortunate to have a strong research community to address issues related to heart disease and stroke prevention and management. Researchers are translating more research findings to inform the public and personal health practice fields on the applicability of their work.

Goal 10:

Research is integral to the action plan and is encouraged on strategic issues. The practice community is informed of the applicability of established research.

Objectives:

1. Identify, and continue to evaluate, areas in the action plan where research would be useful in understanding the issues and impacts of initiatives as implemented in various settings.

2. Develop methods to promote and finance strategic research, building on all opportunities to influence research agendas, including collaboration with other state chronic disease programs, as appropriate.

3. Develop collaborative relationships with groups including research organizations, tribes, the Indian Health Service, and other state chronic disease programs.

4. Support the transfer of knowledge from science to service by applying research findings as they relate to the framework and performance measures.

5. Ensure that the applicability of research findings is broadly disseminated to providers and the community.

10. Research for new insights and innovative solutions to health problems.

Evaluation:

1. Research findings are translated to highlight applicability to providers and the community in Washington.

2. Methods are developed and supported in partnership with local public health agencies and other partners that promote strategic research.

3. Communication about research activities that are relevant to public health practice is regularly assessed.

4. Collaborative relationships are developed with groups to promote and finance strategic research, as well as to influence research agendas.